Message

From: Stensby, David [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=7F3EA928A8DB486B95B1F758507A38DE-DSTENSBY]
Sent: 9/30/2013 4:46:17 PM
To: Janda, Danielle L CIV NAVFAC SW [danielle.janda@navy.mil]
Subject: RE: TI - Work Plan for Groundwater and Soil Gas Monitoring at Sites 6, 12, 21 and 24

Hi Danielle,

EPA is not planning to comment on this document.

From: Janda, Danielle L CIV NAVFAC SW <danielle.janda@navy.mil>
Sent: Monday, September 30, 2013 8:40 AM
To: Chris Glenn; Zech, Myriam@Waterboards; Stensby, David
Cc: Clark, David J CIV NAVFAC SW; Forman, Keith S CIV NAVFACHQ, BRAC PMO; 'William Carson (william.carson@terraphase.com)' (william.carson@terraphase.com); Sunga, Remedios@DTSC
Subject: RE: TI - Work Plan for Groundwater and Soil Gas Monitoring at Sites 6, 12, 21 and 24

Hi Chris, Myriam and David,

Are you planning on submitted comments on the Draft Work Plan for Groundwater and Soil Gas monitoring at NSTI?

V/r,
Danielle Janda
Environmental Engineer
NAVFAC Southwest
BRAC Project Management Office
1455 Frazee Rd, Suite 900
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-----Original Message-----
From: Sunga, Remedios@DTSC [mailto:Remedios.Sunga@dtsc.ca.gov]
Sent: Friday, September 27, 2013 4:48 PM
To: Janda, Danielle L CIV NAVFAC SW
Cc: Clark, David J CIV NAVFAC SW; Forman, Keith S CIV NAVFACHQ, BRAC PMO; Stensby, David; Zech, Myriam@Waterboards; 'William Carson (william.carson@terraphase.com)' (william.carson@terraphase.com); Chris Glenn
Subject: TI - Work Plan for Groundwater and Soil Gas Monitoring at Sites 6, 12, 21 and 24

Hi Danielle,

The following are DTSC comments on the Draft Work Plan for Groundwater and Soil Gas Monitoring at Installation Restoration Sites 6, 12, 21, and 24, dated August 2013.

1) Section 2.2-IR Site 6, Pages 2-1 and 2-2. Please discuss the previous groundwater sampling results for dioxins and furans to support the statement that these chemicals are not COPCs in groundwater at Site 6. Groundwater sampling results for other chemicals (metals and SVOCs), other than petroleum chemicals, should also be discussed.

2) Section 2.3.1-SWDAs, Page 2-2. This section states that the SWDAs were identified from historical aerial photographs and extensive sampling conducted at approximately 3,000 locations (PTES 2008). Please verify the reference cited which is a groundwater monitoring report for petroleum Sites 6 and 25.

3) Section 4.3-Receptors, Pages 4-1 and 4-2. The last sentence in this section states "Ecological receptors, both terrestrial and marine, are not considered primary potential receptors at the four sites." Please revise this statement as contaminated groundwater at the sites may have migrated to San Francisco Bay. Therefore, marine ecological resources is the primary receptor for groundwater contamination since groundwater at Treasure Island has been designated as not a potential source of

drinking water. Please also identify the receptors to soil gas contamination. Humans are the primary receptors for contaminants in soil gas.

4) Section 4.4-Potential Exposure Pathways, Page 4-2. Please include potential exposure pathways to ecological resources to San Francisco Bay since groundwater contaminants may have migrated to Bay water, specifically at Building 1311/1313 Petroleum Area.

5) Section 5.3.1-Groundwater Level Measurement, Page 5-2. This section states "One well that is not in the sampling program at IR Site 6 will be gauged to provide an additional groundwater elevation necessary to evaluate the groundwater flow direction." Please revise this statement since there are only two new wells that were installed for Site 6 after the petroleum removal action, and there were no wells remained when the old wells were removed.

6) Section 5.3.1-Groundwater Level Measurement, Page 5-2. This section states "Similarly, eight wells will be gauged (but not sampled) to supplement the groundwater elevation network at IR Site 12." Please cite the worksheet in Appendix A identifying the Site 12 groundwater wells that will be gauged but not sampled.

7) Section 5.3.2-Groundwater Sampling, Pages 5-1 through 5-4. Please include a summary of the historical groundwater and soil gas data for each site to assist the reviewer in identifying the groundwater wells that should be included in the sampling program.

8) Section 5.3.2-Groundwater Sampling, IR Site 12, Page 5-3. The Site 12 paragraph states "Groundwater samples will be collected from ten of the wells at SWDA A&B, SWDA 1207/1209, SWDA 1231/1233, and the Mariner Court Petroleum Area on an annual basis at the end of the rainy season (March)." Please provide the rationale for taking samples at the end of the rainy season instead of the end of the dry season. Groundwater samples at the end of dry season would have the highest contaminant concentrations that could migrate to San Francisco Bay based on tidal influence.

9) Section 5.3.2-Groundwater Sampling, IR Site 21, Page 5-3. Three wells are included in the sampling program at Site 21 that are located at the core of the plume. The rationale for selecting only three wells in Worksheet #17 of Appendix A is to confirm the human health risk from the vapor intrusion pathway from groundwater contaminants to support the need for Institutional Controls (ICs). Additional wells should be monitored downgradient of the plume near San Francisco Bay to confirm that the plume is contained, does not migrate to the Bay, and ICs are still needed, such as groundwater use restriction. When groundwater concentrations meet the residential risk-based concentrations that are presented in the Site 21 Proposed Plan, restrictions on groundwater use can be removed. Therefore, all wells with concentrations above the residential risk-based concentrations should be monitored.

10) Section 5.3.3-Groundwater Sample Analysis, IR Site 24, Page 5-5. Thirty eight wells were selected for the groundwater sampling program at Site 24. These wells were selected based on four criteria outlined in Worksheet #17 of Appendix A, and the rationale for selecting the wells is to confirm the human health risk from the vapor intrusion pathway from groundwater contaminants. Another rationale for the groundwater monitoring is to confirm that the plume is contained and does not migrate to San Francisco Bay, and to evaluate the need for ICs, such as groundwater use restriction, in the alternative selection in the upcoming Proposed Plan. Therefore, additional downgradient wells should be monitored near the Bay. When groundwater concentrations meet the residential-risk based concentrations, restrictions on groundwater use are not needed; therefore, groundwater wells with concentrations above the residential-risk based concentrations should be also be monitored.

11) Section 5.3.2-Groundwater, Page 5-2. Please explain why sulfate, alkalinity and ferrous iron will be measured at Site 24 and not at Site 21.

12) Section 5.4-Soil Gas Sampling at IR Site 21, Page 5-5.

12.1) Five existing soil gas probes will be sampled for soil gas at Site 21. Please revise the discussion since the soil gas locations cited in this section are inconsistent with the locations in Figure 5. This figure shows SG-03 will be sampled and not SG-SG-05 as the text indicated.

12.2) All soil gas locations that exceed the residential soil gas screening levels should be included in the soil gas sampling program to determine whether the residential land use restrictions can be removed over time. The area with residential land use restriction can also be reduced based on the results of the soil gas sampling. The sampling of these additional wells is supported by the goals of the study as discussed in Worksheet #11, Identify the Goals of the Study that states "The primary decision questions for soil gas sampling activities are: Do current VOC concentrations in soil gas pose an unacceptable risk to human health and/or the environment based upon complete or potentially complete, current or future exposure pathways?" Section 4.5 (Current and Future Land Use) of the Work Plan states that future uses of Site 21 is open space and mixed land use; the developers plan for mixed land use include residential. Therefore, all soil gas locations with concentratio
ns above the residential screening levels should be monitored. The Site-Specific Risk-Based Screening Levels for Subslab Soil Gas Samples for future residents are presented in Table 3 of the Site 21 ROD.

13) Section 7.4-Data Reporting, Page 7-2. Please include historical groundwater and soil gas data tables and figures with concentration contours in the Annual Groundwater and Soil Gas Monitoring Reports.

14) Appendix A - Sampling and Analysis Plan (SAP) for Groundwater Monitoring.

14.1) SAP Worksheet #5-Project Organizational Chart, Page 17 of 174. The agency representatives also have lines of communication with the Navy RPM, Danielle Janda. SAP Worksheet #7 states that the Navy RPM responsibilities include "Acts as lead interface with agencies." Therefore, dash lines should be added from the agency representatives to the Navy RPM in the organizational chart. This comment also applies to Appendix B - SAP for Soil Gas Monitoring, Worksheet #5.

14.2) SAP Worksheet #9-Project Scoping Session, Action Items, Page 29 of 174. This worksheet states "The final ROD for IR Site has been approved. It included limited groundwater and soil gas sampling to monitor hotspots." Please revise this statement since the ROD does not discuss limited sampling to monitor hot spots. The purpose of the groundwater and soil gas monitoring is to verify the need for ICs since the remaining contaminants are above residential screening levels. This comment also applies to Appendix B - SAP for Soil Gas Monitoring, Worksheet #9.

14.3) SAP Worksheet #10-Problem Definition, Receptors and Potential Exposure Pathways, Page 42 of 174. These sections of the worksheet state that ecological receptors, both terrestrial and marine, are not considered primary potential receptors at the four sites. Ecological resources in San Francisco Bay are the receptors of concern for groundwater contamination near the Bay. The potential exposure pathway should include groundwater migration and impact to Bay habitat. Please see Comments #3 and #4. This comment also applies to Appendix B - SAP for Soil Gas Monitoring, Worksheet #10.

14.4) SAP Worksheet #11-Develop the Decision Rule, IR Site 24, Page 49 of 174. This Worksheet states that data will support preparation of a ROD and Remedial Design. Please revise this statement since an FS Addendum is planned for Site 24 so the data will support preparation of the FS Addendum and Proposed Plan.

14.5) SAP Worksheet #14-Summary of Project Tasks, Investigation-Derived Waste, Page 59 of 174. Please discuss how the purged and decontamination water will be disposed of.

15) Appendix B - Sampling and Analysis Plan for Soil Gas Monitoring.

15.1) SAP Worksheet #11 Project Quality Objectives, identify the Goals of the Study, Lateral Boundaries and Vertical Boundaries, Specify Performance or Acceptance Criteria, and Develop the Plan for Obtaining Data, Pages 35 through 37 of 110. Please see Comment #12.2 that requests sampling of additional soil gas locations to support the goal of the study, that will expand the lateral and vertical boundaries of the study area, and that will require revisions to the discussion in the Acceptance Criteria and the Plan for Obtaining Data.

15.2) SAP Worksheet #11-Project Quality Objectives, Develop the Decision Rule, Page 36 of 110. Please clarify the statement "institutional controls restricting non-residential uses for Building 3 will be recommended for removal during the 5-year review." Please specify that the restrictions can be removed anytime in the process when the remaining groundwater and soil gas concentrations meet residential levels.

15.3) SAP Worksheet #15-Reference Limits and Evaluation Table, Pages 47 through 49 of 110. Please include the screening levels for residential scenario for use in the evaluation of ICs requirement. Please see comment #12.2. The Site-Specific Risk-Based Screening Levels for Subslab Soil Gas Samples for future residents are presented in Table 3 of the Site 21 ROD.

15.4) SAP Worksheet #17-Sampling Design and Rationale, Page 53 Of 110. This Worksheet states that the soil gas data will be used to confirm that the human health risk form the vapor intrusion pathway remains within or below the risk management range for commercial/industrial receptors and to support the need for ICs. This statement supports Comment #12.2 that requests sampling of additional soil gas locations and comparing the levels to residential levels to support the need for ICs.

15.5) SAP Worksheet #18-Sampling Locations, Page 55 of 110. Please include additional soil gas sampling locations in the table per the comments above.

16) Typos. Sections 5.1 and 5.2, Page 5-1, Section 6.4, Page 6-3: There is no Appendix C so please change "Appendices B and C" to "Appendices A and B."

Thank you - Medi

Remedios V. Sunga

Project Manager

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